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25920 7590 06/15/2009

MARTINE PENILLA & GENCARELLA, LLP
710 LAKEWAY DRIVE
SUITE 200
SUNNYVALE, CA 94085

EXAMINER

BECKLEY, JONATHAN R

ART UNIT

PAPER NUMBER

2625

DATE MAILED: 06/15/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/816,416

03/31/2004

Hiroki Okabe

ITECP014

8840

TITLE OF INVENTION: PRINT JOB MANAGEMENT APPARATUS AND PRINT JOB MANAGEMENT METHOD

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	09/15/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

**Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE
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INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

25920 7590 06/15/2009

MARTINE PENILLA & GENCARELLA, LLP
710 LAKEWAY DRIVE
SUITE 200
SUNNYVALE, CA 94085

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I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/816,416 03/31/2004 Hiroki Okabe ITECP014 8840

TITLE OF INVENTION: PRINT JOB MANAGEMENT APPARATUS AND PRINT JOB MANAGEMENT METHOD

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
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nonprovisional NO \$1510 \$300 \$0 \$1810 09/15/2009

EXAMINER	ART UNIT	CLASS-SUBCLASS
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BECKLEY, JONATHAN R 2625 358-403000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 _____
- (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 _____
- 3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee
- ☐ Publication Fee (No small entity discount permitted)
- ☐ Advance Order - # of Copies _____

4b. Payment of Fee(s); (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
- ☐ Payment by credit card. Form PTO-2038 is attached.
- ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____

Date _____

Typed or printed name _____

Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/816,416	03/31/2004	Hiroki Okabe	ITECP014	8840
25920	7590	06/15/2009	EXAMINER	
MARTINE PENILLA & GENCARELLA, LLP 710 LAKEWAY DRIVE SUITE 200 SUNNYVALE, CA 94085			BECKLEY, JONATHAN R	
			ART UNIT	PAPER NUMBER
			2625	
DATE MAILED: 06/15/2009				

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 956 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 956 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability	Application No.	Applicant(s)	
	10/816,416	OKABE ET AL.	
	Examiner	Art Unit	
	JONATHAN R. BECKLEY	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to RCE filed 02/26/2009 and accepted examiner's amendment on 6/4/2009.
2. ☒ The allowed claim(s) is/are 1,3,6-12,14 and 17-20.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| <ol style="list-style-type: none"> 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date <u>See Continuation Sheet</u> 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | <ol style="list-style-type: none"> 5. <input type="checkbox"/> Notice of Informal Patent Application 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date ____. 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance 9. <input type="checkbox"/> Other ____. |
|---|---|

/Jonathan R Beckley/
Examiner, Art Unit 2625

/Twyler L. Haskins/
Supervisory Patent Examiner, Art Unit 2625

Continuation of Attachment(s) 3. Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date: 01/19/2006 and 06/23/2008.

DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Peter B. Martine on June 4, 2009.

The application has been amended as follows:

Claim 1 is amended for further clarification of the invention regarding the redundant image data retrieved by the redundant image retrieval module and the reference path for reading the image data of the print job. Claim 1 is amended by adding the previous limitations of dependent claim 2 into the independent base claim. In addition to the added limitations of claim 2, further amendments have been made to clarify details of the limitations to better understand the novelty of the invention.

Claim 1 should hereby be stated:

"A print job management apparatus that manages print jobs, which are executed by a printing device, said print job management apparatus comprising:

a job acceptance module that receives each print job with image data;

a job storage module that has a capacity of storing multiple print jobs received by said job acceptance module with reference paths for reading the image data of the print jobs at a time of executing each print job;

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a redundant image retrieval module that retrieves redundant image data among image data of print jobs stored in said job storage module relative to image data of a single print job received by the job acceptance module;

a job status setting module that leaves at least one of the redundant image data retrieved by said redundant image retrieval module while deleting the other of the retrieved redundant image data, overwrites a reference path for reading the image data of a print job in which the image data was deleted, with a reference path for reading the image data of a print job having the remaining image data among the multiple print jobs having the redundant image data, and sets a status of the print job in which the image data was deleted, such that the remaining image data among redundant image data is shared by the print job having the remaining image data and print jobs in which the image data was deleted; and

a job status changing module that changes an execution status of a print job in a printed status among the print jobs stored in said job storage module, from a 'printed status' to a 'print queuing status,' such that the print job in the printed state is to be reprinted by a user's reprinting request,

wherein each print job includes identification information for identifying the image data, and

said redundant image retrieval module retrieves image data having identical identification information among the image data of the print jobs stored in said job storage module, as the redundant image data."

Claim 2 is canceled.

Claim 12 is amended for respectively the same reasons as claim was amended above. Claim 12 is amended for further clarification of the invention regarding the redundant image data retrieved and the reference path for reading the image data of the print job. Claim 12 is amended by adding the previous limitations of dependent claim 13 into the independent base claim. In addition to the added limitations of claim 13, further amendments have been made to clarify details of the limitations to better understand the novelty of the invention.

Claim 12 should hereby be stated:

“A print job management method that manages print jobs, which are executed by a printing device, said print job management method comprising the steps of:

(a) receiving each print job with image data;

(b) storing the received print job into a job storage module that has a capacity of storing multiple print jobs with reference paths for reading the image data of the print jobs at a time of executing each print job;

(c) retrieving redundant image data among image data of print jobs stored in said job storage module relative to image data of a single print job received in said step (a); and

(d) leaving at least one of the redundant image data retrieved in said step (c) while deleting the other of the retrieved redundant image data while deleting the other of the retrieved redundant image data, overwriting a reference path for reading the image

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data of a print job in which the image data was deleted, with a reference path for reading the image data of a print job having the remaining image data among the multiple print jobs having the redundant image data, and setting a status of the print job in which the image data was deleted, such that the remaining image data among the redundant image data is shared by the print job having the remaining image data and the print job in which the image data was deleted; and

(e) changing an execution status of a print job in a printed status among the print jobs stored in said job storage module, from a 'printed status' to a 'print queuing status,' such that the print job in the printed state is to be reprinted by a user's reprinting request,

wherein each print job includes identification information for identifying the image data, and

said step (c) retrieves image data having identical identification information among the image data of the print jobs stored in the job storage module, as the redundant image data."

Claim 13 is canceled.

Allowable Subject Matter

2. Claims 1, 3, 6-12, 14 and 17-20 are allowed.
3. The following is an examiner's statement of reasons for allowance:

Claims 1 and 12 refer to a print job management apparatus and method which respectively manage print jobs, which are executed by a printing device. However, the prior art of record lacks the novelty of the current invention. Claims 1 and 12 refer to accepting print jobs, storing print jobs with reference paths for reading image data of the print jobs, and retrieving the image data from the storage. The retrieval process is done by retrieving redundant image data which is determined by retrieving identical image data within the print jobs. Once the redundant image data is retrieved, the apparatus and method saves one form of the image data while deleting the other image data which was retrieved. In addition to deleting the redundant files from storage, the reference paths for reading the images of the print jobs of the deleted image data are modified to reference the remaining saved image data for reading the image data.

Claims 1 and 12, respectively, identify the uniquely distinct features:

“...”

retrieving redundant image data among image data of print jobs stored in said job storage module relative to image data of a single print job received in said step (a); and
leaving at least one of the redundant image data retrieved in said step (c) while
deleting the other of the retrieved redundant image data while deleting the other of the
retrieved redundant image data, overwriting a reference path for reading the image data
of a print job in which the image data was deleted, with a reference path for reading the

Art Unit: 2625

image data of a print job having the remaining image data among the multiple print jobs having the redundant image data, and setting a status of the print job in which the image data was deleted, such that the remaining image data among the redundant image data is shared by the print job having the remaining image data and the print job in which the image data was deleted; and

...

wherein each print job includes identification information for identifying the image data, and

said retrieving redundant image data retrieves image data having identical identification information among the image data of the print jobs stored in the job storage module, as the redundant image data.”

Allowable Claims 1, 3, 6-12, 14 and 17-20 should be renumbered to Claims 1-14.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JONATHAN R. BECKLEY whose telephone number is (571)270-3432. The examiner can normally be reached on Mon-Fri: 7:30-5:00 EST (Alternate Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, TWYLER L. HASKINS can be reached on (571)272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jonathan R Beckley/
Examiner, Art Unit 2625
6/5/09

Application/Control Number: 10/816,416

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/Twyler L. Haskins/

Supervisory Patent Examiner, Art Unit 2625